

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte DANIEL CONZELMANN, KARL-HEINZ SEEFRIED and GUNTER STEPHAN

Appeal No. 2001-1210
Application No. 09/255,990

ON BRIEF

Before FRANKFORT, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection (Paper No. 12, mailed March 27, 2000) of claims 1 to 12.¹ Claims 13 to 37, which are all of the other claims pending in this application, have been withdrawn from consideration.

We AFFIRM-IN-PART.

¹ Claim 1 was amended subsequent to the final rejection.

BACKGROUND

The appellants' invention relates to a method for two-sided printing of a sheet of printing material having a front side and a rear side, in a sheet-fed rotary printing press (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Wood	1,089,453	Mar. 10, 1914
Dietz et al. (Dietz)	3,586,437	June 22, 1971
Grindley et al. (Grindley)	4,082,037	April 4, 1978
Wirz	5,259,308	Nov. 9, 1993
Takeuchi	5,642,670	July 1, 1997

The following four rejections under 35 U.S.C. § 103 set forth in the final rejection are before us in this appeal:

- (1) Claims 1, 4 and 10 to 12 as being unpatentable over Wood in view of Grindley;
- (2) Claims 2, 3 and 6 to 8 as being unpatentable over Wood in view of Grindley and Wirz;
- (3) Claim 5 as being unpatentable over Wood in view of Grindley and Takeuchi; and
- (4) Claim 9 as being unpatentable over Wood in view of Grindley and Dietz.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection and the answer (Paper No. 18, mailed November 17, 2000) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 17, filed November 2, 2000) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Claim 1

We sustain the rejection of claim 1 under 35 U.S.C. § 103.

Claim 1 reads as follows:

A method for two-sided printing of a sheet of printing material having a front side and a rear side, in a sheet-fed rotary printing press, which comprises:
cleaning the front side of a sheet of printing material before printed [sic, printing] thereon in a sheet-fed rotary printing press;
also cleaning the rear side of the sheet before printing thereon in a sheet-fed rotary printing press.

Wood discloses a web-treating device for printing-presses. Specifically, Wood teaches the benefits of cleaning both surfaces of a web prior to printing on the web. As shown in Figure 1, the cleaning device is disposed upstream of a web-fed rotary printing press (impression cylinders A and C and printing cylinders B and D) which prints on both sides of the web. The cleaning device cleans both sides of the web and includes rotating brushes 13 and 17.

Grindley's invention relates to improvements in apparatus for removing dusting powder or residue particles from paper sheets during movement of the sheets in a printing press, and prior to the printing (or reprinting) thereof. Grindley teaches (column 1, lines 8-47) that

In offset lithography, it is common practice to apply dusting powder to freshly printed sheets as they are delivered from the blanket cylinder of the press in order to promote drying and prevent unintentional transfer of ink (set off) when the sheets are stacked in face-to-face contact. However, if it is desired to rerun the sheets for overprinting or multicolor work, it is necessary that the powder be removed. Accordingly, when the final printed product is the result of superimposing a number of different colors, the dusting powder is removed and reapplied in each successive run. Besides dusting powder, unprinted sheets direct from a paper mill may have residue particles deposited thereon as a result of the milling process, and it is also desired to clean these sheets as they are run.

Various devices are currently employed in offset presses to remove the dusting powder from the sheets (or continuous paper web in web-fed presses) prior to passage of the sheets between the impression and blanket cylinders. One such device employs a suction head having a stationary brush assembly which engages the surface of each passing sheet to sweep up the powder. This arrangement suffers from the disadvantage that the brushes tend to accumulate ink, thereby requiring frequent replacement, and the suction mechanism is inherently bulky and noisy in operation. Another approach is to employ a cotton roller in conjunction with a vacuum system to carry away the removed powder, but here again the mechanism is inherently noisy. Furthermore, the cotton roller is run in contact with the impression cylinder grippers and is, therefore, subject to uneven wear and at times snags the leading edge of a sheet. The resulting jam requires that the operation of the press be temporarily interrupted to correct the condition.

It is, therefore, the primary object of the present invention to provide apparatus for use in printing presses for removing dusting powder and residue particles, which is relatively simple in construction, easy to maintain, and does not possess the disadvantages mentioned above.

Grindley's invention utilizes a cleaning roller having a soft fibrous surface disposed ahead of the blanket cylinder of an offset press, the surface presenting a nap which swells upon rotation of the roller to wipe particulate matter (dusting powder or residue particles) from the paper sheets before the same are printed. A trough

containing water (in which the particles are soluble) extends parallel to the roller and receives the particles stripped from the roller by a doctor blade. The removed particles are directed from the blade to the trough by a guide surface continuous with the blade which is presented by a specially shaped sheet member extending from the blade into the trough. The water may be recirculated by a pump, or supplied and drained at a rate to prevent the particles from accumulating.

In the rejection of claim 1 before us in this appeal, the examiner determined (final rejection, p. 3) that "[i]n view of the teachings of Grindley et al, it would have been obvious to one of ordinary skill in the art to have used the methods taught by Wood in a sheet-fed perfecting press process as well."

The appellants argue (brief, pp. 16-17) that Wood and Grindley do not suggest the subject matter of claim 1 since (1) Wood discloses a cleaning method for a **web** of paper which would not be practical with sheets of paper; (2) Grindley only cleans one side of a paper sheet after one side has been printed; and (3) Wood and Grindley have different modes of operation thus it would not be possible to combine Wood and Grindley.

In applying the above-noted test for obviousness, we reach the same conclusion as the examiner. That is, in view of the combined teachings of Wood and Grindley, it

would have been obvious at the time the invention was made to a person of ordinary skill in the art to have used the method of cleaning prior to printing taught by Wood in a sheet-fed perfecting press process.

The argument advanced by the appellants does not convince us that claim 1 is patentable for the following reasons. First, the appellants have argued the deficiencies of each reference on an individual basis. However, it is well established that nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. See In re Merck & Co. Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). Second, all of the teachings of Grindley need not be bodily incorporated into Wood (see In re Keller, supra, at 642 F.2d 425, 208 USPQ 881) since the artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment (see Lear Siegler, Inc. v. Aeroquip Corp., 733 F.2d 881, 889, 221 USPQ 1025, 1032 (Fed. Cir. 1984)). In this case, we find sufficient motivation in Grindley's teaching (column 1, lines 23-27) that "[v]arious devices are currently employed in offset presses to remove the dusting powder from the sheets (or continuous paper web in web-fed presses) prior to passage of the sheets between the impression and blanket cylinders" for a person of ordinary skill in the art at the time the

invention was made to have modified Wood's method of cleaning and printing a web to a method of cleaning and printing sheets.

For the reasons set forth above, the decision of the examiner to reject claim 1 under 35 U.S.C. § 103 is affirmed.

Claims 2 to 4 and 9 to 12

Claims 2 to 4 and 9 to 12 which depend from claim 1 have not been separately argued by the appellant. In fact the appellant has stated that claims 2 to 4 and 9 to 12 stand or fall with claim 1 (brief, p. 15). Accordingly, we have determined that these claims must be treated as falling with their independent claim. See In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987) and 37 CFR §§ 1.192(c)(7) and 1.192(c)(8)(iv). Thus, it follows that the examiner's rejection of claims 2 to 4 and 9 to 12 under 35 U.S.C. § 103 is also sustained.

Claim 5

We sustain the rejection of claim 5 under 35 U.S.C. § 103.

Claim 5 reads as follows:

A method for two-sided printing of a sheet of printing material having a front side and a rear side, in a sheet-fed rotary printing press, which comprises:

initially cleaning a front side of a sheet with a first cleaning device, and thereafter cleaning a rear side of the sheet with a second cleaning device disposed downline of the first cleaning device in a sheet transport direction; and subsequently printing on the sheet.

Takeuchi's invention relates to a paper surface cleaning device for removing fine paper dusts, etc., from the surface of a printing paper. As shown in Figure 1, a paper surface cleaning device is provided between a roll paper supply portion of a printing machine for printing a rolled paper and a printing portion thereof, and supported by left and right fixed frames 1 (one of them is shown in Figure 1) which are provided over left and right frames (not shown) of the printing machine. Two guide rollers 2a, 2b are bridged between the left and right fixed frames 1 parallel with various rollers of the printing machine so as to contact the opposite surfaces of a printing paper 3, respectively. The guide rollers 2a, 2b are disposed separately in the vertical direction to form a vertical running path of the printing paper. The printing paper 3 runs at a speed of 20 to 600 meters per minute in the direction indicated by arrows to be printed at the printing portion of the printing machine. Two cleaning units U_1 , U_2 are provided on the fixed frames 1. The cleaning unit U_1 is provided on one side of the printing paper 3, and the cleaning unit U_2 is provided on the other side of the printing paper 3.

In the rejection of claim 5 before us in this appeal, the examiner applied Wood and Grindley as in claim 1 above and further determined (final rejection, p. 4) that

[i]t would have been obvious to one of ordinary skill in the art to have cleaned one side [of the paper sheet] then the other [side of the paper sheet] as taught by Takeuchi instead of simultaneously so as to get the dirt forced through the paper by the first cleaner.

The appellants argue (brief, pp. 18-19) that Wood, Grindley and Takeuchi do not suggest the subject matter of claim 5 for the same reasons as set forth with respect to claim 1 and further since (1) Wood discloses cleaning both sides concurrently; (2) Grindley cleans only one side with only one cleaning apparatus; and (3) Takeuchi is concerned with cleaning a web and not with cleaning sheets.

In applying the above-noted test for obviousness, we reach the same conclusion as the examiner. That is, in view of the combined teachings of Wood Grindley and Takeuchi, it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have used the method of cleaning prior to printing taught by Wood in a sheet-fed perfecting press process and to have cleaned one side of the paper sheet then the other side of the paper sheet as suggested by Takeuchi instead of simultaneously.

The argument advanced by the appellants does not convince us that claim 5 is patentable for the following reasons. First, the appellants have argued the deficiencies of each reference on an individual basis. However, as set forth above, it is well

established that nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. Second, all of the teachings of Grindley and Takeuchi need not be bodily incorporated into Wood since the artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment. In this case, we find sufficient motivation in Grindley as set forth above with respect to claim 1 for a person of ordinary skill in the art at the time the invention was made to have modified Wood's method of cleaning and printing a web to a method of cleaning and printing sheets and we find sufficient motivation in Takeuchi for a person of ordinary skill in the art at the time the invention was made to have further modified Wood's method by cleaning one side of the paper sheet then the other side of the paper sheet instead of simultaneously.

For the reasons set forth above, the decision of the examiner to reject claim 5 under 35 U.S.C. § 103 is affirmed.

Claims 6 to 8

We will not sustain the rejection of claims 6 to 8 under 35 U.S.C. § 103.

Claim 6 reads as follows:

A method for two-sided printing of a sheet of printing material having a front side and a rear side, in a sheet-fed rotary printing press, which comprises: the following method steps performed in the following order:

cleaning a front side of the sheet,
printing on a front side of the sheet,
cleaning a rear side of the sheet, and
printing on the rear side of the sheet.

In the rejection of claim 6, and claims 7 and 8 dependent thereon, the examiner ascertained (final rejection, pp. 3-4) that Wirz, in column 3, teaches "cleaning one side, printing that side, turning the paper over, cleaning the second side, and then printing the second side." The examiner then determined it would have been obvious to one of ordinary skill in the art to have further modified the method of Wood to have arrived at the subject matter of claim 6.

The appellants argue (brief, p. 2) that the examiner's characterization of the teachings of Wirz is in error since only the upper side of the sheet is cleaned. We agree. Wirz teaches (column 3, lines 1-12) that

It is advantageous to use the work and tumble or sheet reversing device when printing cardboard sheet having surfaces which have to be cleaned or subjected to some other finishing treatment such as, e.g., numbering, embossing or the like, before printing. For this purpose, the sheet being fed by the feeder with its upper side facing upwardly is subjected initially to such a finishing treatment, is then turned over by the work and tumble device on the turning device thereof and is perfecter-printed on the underside thereof and, after the

sheet has been turned over again, is subjected to first form printing on the pre-treated upper side thereof.

Thus, Wirz does not teach cleaning one side, printing that side, turning the paper over, cleaning the second side, and then printing the second side since Wirz does not teach any cleaning of the underside of the sheet.

Since Wirz does not teach cleaning one side, printing that side, turning the paper over, cleaning the second side, and then printing the second side, a prima facie case of obviousness has not been established with respect to claims 6 to 8.

Accordingly, the decision of the examiner to reject claims 6 to 8 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 5 and 9 to 12 under 35 U.S.C. § 103 is affirmed and the decision of the examiner to reject claims 6 to 8 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

CHARLES E. FRANKFORT
Administrative Patent Judge

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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